BULLETIN

of the

ONTARIO COLLEGE OF PHARMACY

Vol. II, No. 2 H. J. Fuller, Editor March 1953

CONTENTS

		page
For Better Public and Professional Relations	Dean F. N. Hughes	8
The Retail Pharmacist and the Small Hospital	Mrs. I. M. Stauffer	9
Trends in Research	R. M. Baxter	10
New Drug Used in Treatment of Leprosy		
Succinylcholine as a Muscle Relaxant		
Plasma Substitutes		
The Importance of Chemistry in a Pharmaceutical Education	F. R. Lorriman	11
Historical Gleanings	Miss P. Takenaka	12
Sodium Phenobarbitone	G. C. Walker	13
Editor's Apology		15
Canadian Pharmaceutical Survey		15
New Notes		15

REFRESHER COURSE TIME TABLE

Monday, May 4, 9.30 a.m. and 7.30 p.m.

Recent Developments in Antibiotics — Dean F. N. Hughes
Sedatives — Dr. J. K. W. Ferguson

Tuesday, May 5, 9.30 a.m. and 7.30 p.m.

Geriatrics and the Pharmacist — Dr. R. M. Baxter
Oral Hygiene and Dental Public Health — Dr. Glenn T. Mitton

Wednesday May 6, 9.30 a.m.

Two Lectures on Animal and Plant Health by Professors from the Ontario Veterinary College and the Ontario Agricultural College

Thursday, May 7, 9.30 a.m. and 7.30 p.m.

Chemotherapeutic Agents in the Treatment of Tuberculosis — Prof. D.H. Murray
Gastric Antacids — Dr. J. K. W. Ferguson
Analysis of 1952 Profit and Loss Statements — Prof. H. J. Fuller

---

Monday, Tuesday, Thursday, May 4, 5, 7, at 2.00 p.m.

DISPENSING CLINIC (registration limited) — Dr. G. C. Walker

NOW IS THE TIME TO REGISTER - see last page

Published five times a year, January, March, May, September, November by the authority of theCouncil of the Ontario College of Pharmacy, Editorial Office, 46, Gerrard Street, East, Toronto 2, Ontario.

Circulation Over 3,100

COMMITTEE ON EXTENSION SERVICES

H. J. Fuller, Chairman	Faculty
F. N. Hughes	Faculty
M. Haberman	District No. 5
W. S. Luton	District No. 8
C. P. Taylor	District No. 4

FACULTY.

R. O. Hurst, Phm. B. (Tor.) Dean Emeritus

F. Norman Hughes, Phm. B. (Tor.), B.S. in Phar. (Purdue), M.A. (Tor.)
Dean of Faculty, Professor of Materia Medica and Pharmaceutical Chemistry

George C. Walker, B.Sc. (Pharm.) (Alta), M.S., Ph.D. (Purdue),
Associate Professor of Pharmacy.

Horace J. Fuller, Phm. B. (Tor.), B.A. (West.), M.A. (Yale),
Associate Professor of Pharmacy in charge of Pharmacy Administration.

Daniel H. Murray, Phm. B. (Tor.), B.S.P., B.A., M.A. (Sask.),
Assistant Professor of Pharmaceutical Chemistry.

Ross M. Baxter, Phm.B. (Tor.), B.S.P. (Sask.), M.S., Ph.D. (Fla.)
Assistant Professor of Materia Medica.

G. R. Paterson, Phm.B. (Tor.), B.S.P., M.Sc. (Sask.),
Assistant Professor of Pharmaceutical Chemistry.

Allan M. Goodeve, Phm.B. (Tor.), B.S.P. (Sask.), Lecturer in Pharmacy.

Mrs. I. E. Stauffer, B.Sc., (Pharm.) (Alta.), M.Sc. (Western Reserve),
Special Lecturer in Hospital Pharmacy.

Paul P. I. Sun, B.Sc., (Pharm.) (West China), Instructor in Pharmacy.

D. Barton, Phm.B., B.Sc.Phm., (Tor.), Assistant in Pharmaceutical Chemistry.

G. E. Brooks, B.Sc. Phm. (Tor.), Assistant in Pharmaceutical Chemistry.

Miss D. L. Brygidar, Phm.B. (Tor.), Assistant in Pharmacy

Miss S. M. Elliott, Phm.B. (Tor.), Assistant in Pharmacy.

G. Murray Hetherington, Phm.B. (Tor.), Assistant in Pharmacy

Mrs. R. E. Smith, Phm.B. (Tor.), Assistant in Pharmacy

ADMINISTRATIVE STAFF

H. M. Corbett, Phm.B. (Tor.), Registrar-Treasurer
Miss F. M. Ward, B.A., Secretary to the Registrar
Miss H. M. Walton, Secretary to the Dean
Miss D. James, Librarian
Miss Irene Hoy, Secretary
T. E. E. Greenfield, Inspector.

-- From the Dean's Desk --

For Better Public and Professional Relations

The concepts which the public hold with respect to Pharmacy -- or any profession -- are largely a reflection of the conduct of the individual practitioner. The conduct of the practitioner, in turn, reflects his own basic attitudes to the profession. For example, my opinion of the medical profession is largely based on those general practitioners and specialists who have attended my family. They have displayed a kindly, earnest devotion to the task at hand, they have responded to calls at all hours, and their fees have been moderate. Consequently my concept of that profession, as practised, is a very lofty one, despite the fact that others may express different viewsat times.

Moreover, I can see no reason why the public should not have a deservedly high opinion of the practice of Pharmacy, if pharmaceutical practitioners generally would alter their own views toward their vocation, and make a determined effort to reflect these viewsin their daily practice. In a later issue I want to deal with our attitudes to Pharmacy, but to restrict this chapter to one aspect of the pharmacist's public contacts, namely his choice of words -- spoken or written -- when referring to Pharmacy.

It is not easy to change habits but I am convinced that in the case of a few very important words, a determined, successful effort could begin to change our own thinking and would certainly have a subtle effect in modifying public opinion respecting Pharmacy. Several of these expressions were referred to in the January issue, but they are repeated herein as well. The chief offenders are: "druggist", "drug business", "drug trade", "graduate druggist", "graduate pharmacist", "drug apprentice", "merchandise (prescritpion) price", and "customer". Preferred expressions, with comments, follow : PHARMACIST or PHARMACEUTICAL CHEMIST or PHARMACEUTICAL PRACTITIONER instead of "druggist". The word "apothecary" would be good except that it is less familiar to the public. In continental Europe the equivalent of "apothecary" or "pharmacist" is generally employed. In Quebec "pharmacien" is used almost exclusively. "Druggist" comes to us from England. The name was originally applied to a dealer in drugs, not to one who compounded prescriptions. Names corresponding to "druggist" refer in some European countries to less well qualified persons who are allowed to sell certain medicines but not to dispense prescriptions. Just as graduates in medicine prefer "physician" to "doctor" so should we prefer PHARMACY or PHARMACEUTICAL PRACTICE instead of "drug business" or "drug trade". While we recognize the dual nature of the practice of Pharmacy, the use of "drug business" places the emphasis in the wrong place entirely. It implies that the Pharmacy is just another retail business. When it is used constantly as it is by some pharmacists the public must sometimes assume this implication to be correct. The use of "practice" (e.g. "I bought a pharmaceutical practice", or "he is a "pharmaceutical practitioner" identifies Pharmacy as a health profession. "APPRENTICE IN PHARMACY" instead of "drug apprentice". This last designation is objectionable, both with respect to correct English and its connotation. GRADUATE IN PHARMACY or PHARMACIST instead of "graduate pharmacist" or "graduate druggist" The last two terms suggest that there are some pharmacists who are not graduates. Yet in the "Help Wanted" advertisements they are used often. It is not good. "FEE"instead of "price", when referring to prescriptions. This requires no comment. "Price" suggests simply a purchase of goods,not a professional service. "PATIENT" instead of "customer" especially when referring to prescriptions or hospital supplies. Again the different connotations are evident. The term "PATRON" is otherwise much to be preferred to "customer". "STOCK" instead of "merchandise". I will discuss these terms and also "merchandising" in the next issue.

If pharmacists individually and, especially through their organizations would make a real effort to change their use of terms as suggested, our public and professional relations would be much improved.

F.N.H.

The Retail Pharmacist and the Small Hospital

The retail pharmacist of 1953 is overlooking an important opportunity to expand his professional service in the community if he has not approached the small hospitals in the area. In hospitals of 100 beds or over, hospital administrators have accepted the fact that a well organized pharmacy department supervised by a well qualified pharmacist is a necessity. In hospitals of less than 100 beds, a "hospital drug room" is maintained and a local retail pharmacist is employed as a "consulting pharmacist". With the expansion of hospital facilities, as a result of the development of the National Health Programme, many new positions for pharmacists will be forthcoming in the hospital field.

In May 1948, the National Health Programme was introduced by the federal government, which agreed to make available to the provinces, by means of grants-in-aid for specific health purposes, an amount of approximately $31,000,000 annually. The administration of these grants was placed under the Directorate of Health Insurance Studies, one of the Divisions of the Health Branch of the Department of National Health and Welfare.

The report of the Ontario Health Survey Committee, working under this directorate, was tabled in the House of Commons, Ottawa, early last year. Approximately half of the health grants spent in Ontario or $8,086,545 has been used to extend hospital accommodation. The Health Survey Committee recommended 10,429 additional beds for general hospitals by 1954 and the replacement of obsolete hospital buildings containing 4,619 beds. Applications for aid to provide 6,843 beds, or about two-thirds of the minimum target, were submitted to the Dominion government in 1952. Assuming that, on the average, one pharmacist will be required for each 100 beds, some 60 or 70 will be needed this year and over 100 in the very near future.

In the larger hospitals where a Pharmacy Department has been organized, the full-time services of a hospital pharmacist will be required. However, in some of the small hospitals, fifty beds and under, the local retail pharmacist or a member of his staff may have an opportunity to be engaged as a part-time employee of the hospital or provide some pharmaceutical service from his store. In either case, some organization is necessary if an arrangement which will be suitable to both the pharmacist and the hospital governing board is to be worked out.

In most cases a hospital staff physician will be delegated to supervise the operation of the "drug room" and to give advice on pharmaceutical problems. Arrangements are then made for the services of a "consulting pharmacist" and these two form the nucleus of a Pharmacy and Therapeutic Committee. In hospitals under fifty beds, two members of this Committee may be sufficient, but in hospitals between fifty and one hundred beds it might be well to have the services of both Medicine and Surgery represented.

The main purpose of the Pharmacy and Therapeutics Committee will be to establish policies and procedures relative to the pharmaceutical service to be provided in the hospital. These should include the following :

(1) Setting up specifications both as to quality and source for the purchase of all drugs, chemicals, antibiotics and pharmaceutical preparations used in the treatment of patients.

(2) Outlining the sources of supply and procedures in purchasing. Stock pharmaceuticals might be purchased direct from the wholesaler or manufacturer, or bought on contract through the local retail drug store.

(3) Outlining procedures for the purchase and control of narcotics and dangerous drugs. Burglar-proof storage facilities should be provided for narcotics and adequate receiving and issuing records should be set up. Records of consumption should also be maintained.
(4) Outlining procedures for the procurement, storage and use of tax-exempt alcohol.
(5) Establishing rules and regulations with regard to the filling and labelling of all containers of pharmaceuticals.
(6) Determining the pharmaceuticals to be stocked on the nursing units, in the emergency room etc.
(7) Providing for the periodic inspection of pharmaceuticals stocked by the various divisions of the hospital.
(8) Establishing a method of administering a charge system for supplies.
(9) Establishing a method of securing periodic physical inventories of Pharmaceutical stock.
(10) Providing for the disposal of deteriorated, overstocked or obsolete preparations. Permission may be secured from the vendor to return all intact containers, but deteriorated or obsolete preparations should be destroyed.
(11) Initiating the development of a basic formulary or drug list, giving a list of stock pharmaceuticals and the sizes and quantities available.
(12) Establishing a method of handling and compounding physician's prescriptions for patients in the hospital.

The most satisfactory way to provide for pharmaceutical service, even in the very small hospital, is to have the pharmacist spend certain hours in the hospital each day. Once the above policies and procedures have been established, hours of service, and other administrative regulations may be worked out between the pharmacist and the hospital administrator. The alert retail pharmacist will soon find more opportunities for service such as small scale manufacturing and the development of new formulas etc. and such close contacts with the medical staff of the hospital will shortly enhance his professional relationships with members of the medical profession in the community. The hospital will benefit from the economies derived from the utilization of the talents of a qualified pharmacist, but of greater importance is the fact that it will be able to meet all its legal responsibilities with regard to drugs and be eligible for the coveted approval of accreditation bodies, such as the American College of Surgeons, and better rating in the hospital field.

Mrs. I. E. Stauffer.

Trends in Research.

New Drug Used in Treatment of Leprosy

Since there is a similarity between the causative organisms in tuberculosis and leprosy many of the chemicals which produce beneficial results in one condition have been shown to be useful agents in the treatment of the other. Thus the sulfones (Promizole, etc.) which have proven effective in treating leprosy have also proven of some value in tuberculosis. Streptomycin which has proven so effective in tuberculosis has been tried for the treatment of leprosy but with somewhat disappointing results. However Streptomycin and the sulfones constitute the most useful therapeutic combination today for this condition.

Recently it has been announced that the new isonicotinic acid hydrazides (Isoniazid) have shown promise in the treatment of leprosy. In daily doses of 200 - 300 mgs. there were remission of some of the characteristic symptoms (lumpy nodules, sores in eyes, etc.). However, further research is necessary to prove if these agents will cure the condition of leprosy

Succinylcholine as a Muscle Relaxant

This new drug has shown certain advantages over curare as a muscle relaxant in preparing patients for certain surgical operations. Succinylcholine has a more rapid onset of action and its effect wears off in 2 to 3 minutes whereas curare exerts its maximum effect in three minutes and lasts for fifteen to twenty minutes. It appears that there is less depression of the respiratory muscles when succinylcholine is used instead of curare. Its specific effect in relaxing throat and jaw muscles is especially useful since it facilitates the insertion of tubes to aid breathing during surgury.

Plasma Substitutes

Two of the most useful agents that are available as blood plasma substitutes or blood plasma volume extenders are Dextran and polyvinyl pyrolidone (P.V.P.). Dextran is produced by the fermentation of sucrose by the non-pathogenic bacteria Leuconostoc mesenteroides. Polyvinyl pyrolidone however is a synthetic preparation with one of its starting chemicals being acetylene. It was first introduced during World War II by the Germans as a blood plasma substitute. Dextran is a complex polysaccharide, similar in structure to starch or glycogen, is slowly broken down in the body. Polyvinyl pyrolidone is not readily broken down and may therefore accumulate in the body or cause kidney damage. However, controlled studies have not revealed any of these untoward effects.

R.M.B.

The Importance of Chemistry in a Pharmaceutical Education.

As might be expected from the fact that Pharmacists and Chemists have essentially the same antecedents in the Ancient Apothecaries, it is not surprising that the study of Chemistry has constituted, and in the future will to a greater extent, constitute a very integral part of Pharmaceutical education. The British Pharmacopoeia specifications in many cases, call for quite exacting chemical analyses, which require an understanding, not only of experimental technique, but of the principles of Inorganic, Organic and Physical Chemistry.

In Inorganic Chemistry, the student learns to master the Laws and Hypotheses relating to chemical reactions, to use analytical balances and various volumetric devices; in Organic Chemistry he is taught to extend this experience and background into the realm of carbon compounds, and in Physical Chemistry, he is shown how these laws are interpreted statistically, diagramatically and mechanically. He learns how to apply the Phase Rule to a consideration of types of system encountered in everyday chemical practice.

The growing importance of synthetic pharmaceuticals has made it even more necessary that a pharmacist have a good knowledge of the make up of substances, and now that the relationship between Chemical structure and Physiological properties is being more completely understood, a great new vista has opened up for those who can appreciate the experimental information given by a structural formula.

A comparison of the number of pure chemical substances, particularly those of the synthetic organic type, listed in the 1932 and in the 1948 editions of the British Pharmacopoeia is all that is necessary to convince the reader of the facts as stated above.

Dr. F. R. Lorriman,
Associate Professor of Organic Chemistry
University of Toronto.

Historical Gleanings.

Upper Canada Gazette, November 23, 1796

Just received and for sale at F.W.A. Hurst's Apothecary Store, Niagara -- Aloes, Antim. tartar, Cera Flav., Calomel, Cantharides, Tinctures, Ichthyocolla, Turlington's Balsam, Hooper's Pills etc.

York Gazette, February 20, 1808.

Wanted as an apprentice a young man of respectable connections, who will be instructed in the Greek and Latin languages, and the Practice of Physic and Surgery, midwifery and Pharmacy. James Glennon, York.

York Gazette, September 3, 1808.

Dr. Fothergill has during the last month cured numerous poor persons applying to the Westminster and the Western Dispensaries for relief under rheumatic complaint, by giving 8 - 10 drops of Fowler's Solution of Arsenic and 8 drops of Laudanum in any convenient menstruum, three times a day.

Upper Canada Gazette, September 7, 1820

For sale at E. and J.Lesslie's Store, King Street, York. Books, ink, musical instruments, maps, fishing reels, subscriptions to review etc. Also Best Pale Peruvian Bark.

York Gazette, September 10, 1811

Dysentery

A certain cure for the Dysentery in the worst stage of the disease

1 gill sweet oil
1 gill good West India rum
1 gill West Indian molasses (not sugar house molasses)

Simmer them together, and stir them till well mixed; one tablespoonful every hour for a grown person, and children a due proportion, according to the age and strength, should be taken.

Upper Canada Gazette, September 7, 1820

William Lyon MacKenzie, Dundas, respectfully informs the Public, that the copartnership lately carried on by him with Mr. John Lesslie of York, under the firm of MacKenzie and Lesslie, having by mutual consent, been dissolved, he will continue to carry on business on a part of the same premises, on his own account; and will sell on moderate terms for Cash or Produce, Dry Goods, Hardware, Groceries, Drugs and Medicines, Glassware, Crockery, Books, Stationery, Teas, Fancy Goods, Oils and Paints, but has declined to continue to retail spiritous liquors.

Editor's note - These Historical Gleaning were found by Miss Phyllis Takenaka, B.Sc.(Phm.) in the Province of Ontario Archives.

Request

The College library lacks copies of the Canadian Pharmaceutical Journal for the years 1915 - 1921 inclusive. If you have old journals of this period stored away, won't you consider making them available to the College?

Sodium Phenobarbitone
(continued from January issue)

℞

Sodium Luminal		gr. 1/2
Liq. Atrop. 1%		m. 1
Syr. Aurant.		m. 20
Aq.	ad.	m. 60

4 fluid oz.
Sig: m. 60 ex aq. t.d.s. semihor. a.c.

Prescriptions of this type are very commonly prescribed. Sodium luminal is incompatible with alkaloidal salts such as atropine sulphate, phenobarbitone being formed and if in excess of its solubility precipitated. In the example cited 16 grs. of sodium liminal could be converted into 14.6 grs of luminal of which less than 2 grains would dissolve in the four ounces of aqueous vehicle (1). The alkaloidal salt in this instance being atropine sulphate the likelihood of precipitation is lessened as the amount of salt present is necessarily small (dose 1/240 - 1/60 gr.). On calculation it proved to be 1/3 gr. This reacts with approximately 1/4 gr. of sodium luminal to give roughly 1/4 gr. of luminal and 1/3 gr. atropine alkaloid. Both of these substances are well within their solubility and thus there can be no precipitation. To effect precipitation in a mixture of this type would require 3 gr. of atropine sulphate to form 2 gr. of phenobarbitone. Even if the maximum dose of atropine sulphate were prescribed in a one drachm dose a four ounce mixture would contain only 8/15 gr. However, the pharmacist should realize that it is theoretically an incompatibility and there may be other substances prescribed simultaneously that will result in decomposition. For example if an acid syrup or other acidic ionizing substance were present in an atropine sulphate-sodium phenobarbitone solution, then precipitation of the base phenobarbitone would be evident.

℞

Phenobarbitone Sodium		gr. vi
Elixir Vitamin B_1	q.s.	oz. iv

This is a very common incompatibility and can be serious. It does not matter whether the liquid is a B_1 elixir or a B complex elixir, the results are in most all cases the same. Precipitation may or may not occur depending on the alcohol content of the vehicle. The elixir of thiamine is maintained at an acid pH because of the stability of the thiamine hydrochloride and the pharmacist should note that it is the hydrochloride that is generally present. Not only then is the free phenobarbitone precipitated but due to the alkalinity of the soluble phenobarbitone the thiamine activity is destroyed. Phenobarbitone base should be substituted for the sodium salt and the alcohol content increased accordingly. This is the method of choice, although if phenobarbitone base is used with the elixir, suspension can be made with some suitable suspending agent. Some authorities consider the suspension of potent drugs a little risky but there should be no danger with the proper pharmaceutical technique and precautionary statements. The feature of import to the pharmacist is that alkalinity destroys vitamin activity.

℞

Aneurine Hydrochloride	5 mg.
Ascorbic Acid	50 mg.
Sodium Luminal	gr. 1/4
Syrup	m. 20
Water to	m. 120

Mitte 8 fl. oz.
Sig. m. 120 t.d.s. a.c.

This prescription was presented in Australia (2) and bearing in mind the difficulties present before the pharmacist substituted luminal and suspended it with mucilage of tragacanth. The vitamins would of course deteriorate rapidly in an alkaline solution.

℞

Sodium Phenobarbitone		grs. viii
Elixir of Three Bromides	q.s.	oz. iii

Sig: Drachms 1, o. d.

This prescription was submitted to the American Pharmaceutical Association and is a rather common type either as is or with just one or more bromides used. Sodium phenobarbitone is compatible with sodium and potassium bromides but with ammonium salt ionizes acidically and the alkaline phenobarbitone reacts to precipitate insoluble phenobarbital crystalline in nature and sometimes forming a slightly coloured or amber solution. Elixir of three bromides generally has an acid pH and would have to be made alkaline to be compatible with the above. Phenobarbitone should always be substituted when Ammonium bromide is present since sodium phenobarbitone is incompatible with it and the alcohol content of the prescription ascertained and raised if necessary for solution.

℞

What would you do with this prescription ?

Phenobarb. Sod.		gr. 6
Pot. Brom.		
Ammon. Brom.		
Sod. Brom.	aa	gr. 120
Tinct. Valer. Ammon.		m. 240
Aq. Chloroform		Fl. oz. 8

Sig: 1/2 fl. oz. t.d.s. p.c. ex aq.

℞

Ephedrine Sulphate		3 gr.
Codeine Phosphate		2 gr.
Aminophyllin		15 gr.
Potassium Iodide		8 gr.
Seconal		2 gr.
Nembutal Elixir	q.s. ad	oz. 1

This prescription is given here to illustrate a probable incompatibility (3) (4) There is a precipitate on standing and it is likely to be theophyllin. This latter substance is stable in alkaline solutions and the above mixture is acidic. The acidity precipitates theophyllin and releases ethylenediamine. There has been little work done yet along this line but suffice it to say that if the above prescription had embraced any likely amount of sodium phenobarbitone, the mixture would probably precipitate due to the reaction of the acid salts. It is safer and wiser to use phenobarbitone and increase the alcohol content.

℞

Phenobarbitone Sodium	gr. vii
Eskay's Neurophosphates	oz. iii

The active ingredients are kept in solution by a slight excess of phosphoric and lactic acids. If an alkaline-reacting substance such as phenobarbitone sodium neutralizes the acid there is a precipitation of the glycerophosphate and of phenobarbitone. It is better to use phenobarbitone with sufficient alcohol to produce a clear solution. 2 drachms of alcohol will suffice here to dissolve the phenobarbitone and then make up to volume with the neurophosphates.

There are many other prescriptions that we could write but this will suffice to introduce us to some of the limitations of sodium phenobarbitone. Chloral hydrate will precipitate phenobarbitone base and liberate chloroform on standing in line with the characteristic reaction of chloral hydrate and alkalies. The pharmacist should be every-ready to point out to the physician the hazards that he may encounter in writing prescriptions using some of the newer and more popular medications.

1. Applied Pharmaceutics, Aust. J. Pharm. 31, 199 (1950)
2. Applied Pharmaceutics, Aust. J. Pharm. 32, 537 (1951)
3. Prescription Information Service, J. Am. Pharm. Assoc., Pract. Ed. 12, 202 (1951)
4. Prescription Information Service, J. Am. Pharm. Assoc., Pract. Ed. 12, 110 (1951)

G.C.W.

Editor's Apology.

The January issue of the Bulletin was not mailed until the middle of February to some 500 hundred or more new Members of the College. For this we apologize. The delay was incident to the tremendous amount of increased work on the office staff recording the more than 500 new members, getting out their receipts, and preparing the list for the stencil firm who make the stencils for the addressograph. We will try not to let it happen again.

Canadian Pharmaceutical Survey

Some pharmacists end their fiscal year on December 31, some January 31, some February 28, and some March 31. So that all the questionnaires do not arrive about the same week and thus entail a great amount of work processing them all at one time, the questionnaire was mailed to every pharmacist in Canada early in January. If your fiscal year ends anytime up to the 31st of March there is still time to get in the 1952 Survey. And if you have mislaid your questionnaire a new one has just gone out in the mail with your O.R.D.A. Bulletin. We thank Mr. Harold Smith and the O.R.D.A. for this thoughtful kindness.

News Notes

In 1951 Canadian manufacturers turned out $1,370,000 worth of face powders, $1,091,000 worth of lipstick and refills, and $217,000 worth of rouge and refills. Canadian manufacturers produce about 98% of all domestic supplies of toilet preparations.

In 1951, 63% of the single population of 15 years of age and over lived in urban centres, as did 65% of all married, 68% of all widowed and 80% of all divorced Canadians, or 64% of the total population 15 years of age and over. 52% of all married Canadians were between 25 and 44 years of age.

D.B.S. Weekly Bulletin

Of 505 people tested, 39% of Pharmacy patrons favour Self Service, 35% oppose according to Drug Trade News, New York, November 10, 1952.

APPLICATION FORM

REFRESHER COURSE

THE ONTARIO COLLEGE OF PHARMACY

and the

CANADIAN FOUNDATION for the ADVANCEMENT OF PHARMACY

Monday, May 4 to Thursday, May 7, 1953.

Name (print) . . . . . .

Address . . . . . .

. . . . . .

Please send me Lecture Cards for the REFRESHER COURSE, May 4 - 7, 1953 as follows :

..... Morning Series ..... Evening Series

..... Dispensing Clinic (Afternoon)
(registration limited)

Enclosed Money Order (or Cheque payable at par in Toronto) for $.....

Lecture Cards will be transferable but Lecture Cards for Morning Series will NOT admit holder to an Evening Series Lecture or vice versa.

....

Date Signature

Mr. H. M. Corbett, Registrar-Treasurer,
Ontario College of Pharmacy
46, Gerrard St. East, Toronto 2.

Registration Fees

For 9 Lectures, mornings or evenings, $ 5.00 For Dispensing Clinic $ 5.00

For 9 Lectures and Dispensing Clinic $ 10.00

There are many other prescriptions that we could write but this will suffice to introduce us to some of the limitations of sodium phenobarbitone. Chloral hydrate will precipitate phenobarbitone base and liberate chloroform on standing in line with the characteristic reaction of chloral hydrate and alkalies. The pharmacist should be every-ready to point out to the physician the hazards that he may encounter in writing prescriptions using some of the newer and more popular medications.

1. Applied Pharmaceutics, Aust. J. Pharm. 31, 199 (1950)
2. Applied Pharmaceutics, Aust. J. Pharm. 32, 537 (1951)
3. Prescription Information Service, J. Am. Pharm. Assoc., Pract. Ed. 12, 202 (1951)
4. Prescription Information Service, J. Am. Pharm. Assoc., Pract. Ed. 12, 110 (1951)

G.C.W.

Editor's Apology.

The January issue of the Bulletin was not mailed until the middle of February to some 500 hundred or more new Members of the College. For this we apologize. The delay was incident to the tremendous amount of increased work on the office staff recording the more than 500 new members, getting out their receipts, and preparing the list for the stencil firm who make the stencils for the addressograph. We will try not to let it happen again.

Canadian Pharmaceutical Survey

Some pharmacists end their fiscal year on December 31, some January 31, some February 28, and some March 31. So that all the questionnaires do not arrive about the same week and thus entail a great amount of work processing them all at one time, the questionnaire was mailed to every pharmacist in Canada early in January. If your fiscal year ends anytime up to the 31st of March there is still time to get in the 1952 Survey. And if you have mislaid your questionnaire a new one has just gone out in the mail with your O.R.D.A. Bulletin. We thank Mr. Harold Smith and the O.R.D.A. for this thoughtful kindness.

News Notes

In 1951 Canadian manufacturers turned out $1,370,000 worth of face powders, $1,091,000 worth of lipstick and refills, and $217,000 worth of rouge and refills. Canadian manufacturers produce about 98% of all domestic supplies of toilet preparations.

In 1951, 63% of the single population of 15 years of age and over lived in urban centres, as did 65% of all married, 68% of all widowed and 80% of all divorced Canadians, or 64% of the total population 15 years of age and over. 52% of all married Canadians were between 25 and 44 years of age.

D.B.S. Weekly Bulletin

Of 505 people tested, 39% of Pharmacy patrons favour Self Service, 35% oppose according to Drug Trade News, New York, November 10, 1952.

APPLICATION FORM

REFRESHER COURSE

THE ONTARIO COLLEGE OF PHARMACY

and the

CANADIAN FOUNDATION for the ADVANCEMENT OF PHARMACY

Monday, May 4 to Thursday, May 7, 1953.

Name (print) . . . . . .

Address . . . . . .

. . . . . .

Please send me Lecture Cards for the REFRESHER COURSE, May 4 - 7, 1953 as follows :

..... Morning Series ..... Evening Series

..... Dispensing Clinic (Afternoon)
(registration limited)

Enclosed Money Order (or Cheque payable at par in Toronto) for $.....

Lecture Cards will be transferable but Lecture Cards for Morning Series will NOT admit holder to an Evening Series Lecture or vice versa.

....

Date Signature

Mr. H. M. Corbett, Registrar-Treasurer,
Ontario College of Pharmacy
46, Gerrard St. East, Toronto 2.

Registration Fees

For 9 Lectures, mornings or evenings, $ 5.00 For Dispensing Clinic $ 5.00

For 9 Lectures and Dispensing Clinic $ 10.00